REMARKS

This is in response to the Office Action dated August 10, 2005. Claims 1-13, 15, 17-20 and 24 are pending.

Section 112 Rejection

Claims 1, 15 and 24 stand rejected under Section 112, first paragraph. The Office Action contends that the phrase "no IR reflecting layer comprising significant amounts of Ag or Au" is not described in the specification. This Section 112 rejection is respectfully traversed. The specification as originally filed specifically states that "the coated article has no infrared (IR) reflecting layer comprising significant amounts of Ag or Au" (see original claim 21, which is part of the specification as originally filed). Thus, the specification as originally filed does support this claim language. Applicant herein has added this language to paragraph 10 of the specification as suggested by the Examiner. Since the specification as originally filed does describe this language, it is respectfully requested that the Section 112 rejection be withdrawn.

Art Rejection – Claim 1

Claim 1 stands rejected under Section 103(a) as being allegedly unpatentable over Lingle '662 in view of Ohsaki and Lingle '585. This 3-way Section 103(a) rejection is respectfully traversed for at least the following reasons.

Claim 1 requires "a layer comprising tin oxide provided on and contacting a surface of the glass substrate; a layer comprising silicon nitride provided on and contacting the layer comprising tin oxide; an infrared (IR) reflecting layer located on the substrate over the layer comprising tin oxide and over the layer comprising silicon nitride, wherein the IR reflecting layer comprises one or more of NiCr, Cr, Nb, and NbZr, and wherein the coated article has no infrared (IR) reflecting layer comprising significant amounts of Ag or Au." In other words, the

IR reflecting layer cannot be a silver layer. For example, see Fig. 1 of the instant application which illustrates glass/SnO_2/Si_xN_y/IR refl/dielectric. The cited art fails to disclose or suggest the aforesaid features of claim 1.

Lingle (US 2002/0064662) discloses a double-silver low-E coating, where the IR reflecting is performed by first and second silver based layers. There is no disclosure or mention in Lingle '662 of an IR reflecting layer comprising one or more of NiCr, Cr, Nb, and/or NbZr as required by claim 1. Instead, Lingle '662 teaches directly away from the invention of claim 1 because Lingle '662 discloses two silver layers for IR reflecting layers – which is expressly excluded by claim 1. In particular, claim 1 expressly excludes the low-E coating of Lingle '662 because claim 1 states that the coated article has no infrared (IR) reflecting layer comprising significant amounts of Ag or Au.

Moreover, one of ordinary skill in the art would never have modified Lingle '662 as alleged in the Office Action. In particular, the Office Action contends that it would have been obvious to have replaced Lingle '662's Ag IR reflecting layers with the Ni or NiCr of Lingle '585 for example. One of ordinary skill in the art would never have done this. Specifically, Lingle '662 relates to a low-E coating designed for high visible transmittance (at least 70 or 75% transmittance as taught in the abstract) so as to be useful for vehicle windshield applications. One of ordinary skill in the art would never have replaced the Ag layers of Lingle '662 with the Ni or NiCr of Lingle '585 because this would significantly degrade the transmittance of the coated article, such that the product could no longer be used for its desired windshield purpose. In particular, such a modification (replacing both Ag layers with Ni or NiCr) would result in a coated article having a transmittance well below 50% so that the product could not even be used as a vehicle windshield, thereby destroying the functionality and an intended purpose of Lingle

'662 (see Lingle '662's teaching in paragraph [0003] that a transmission of at least 70% is needed for windshield applications).

Likewise, one of ordinary skill in the art would never have replaced the Ag layers of Lingle '662 with the Cr of Ohsaki because this would significantly degrade the transmittance of the coated article, such that the product could no longer be used for its desired windshield purpose. In particular, such a modification (replacing both Ag layers with Cr) would result in a coated article having a transmittance well below 50% so that the product could not even be used as a vehicle windshield, thereby destroying the functionality and an intended purpose of Lingle '662 (see Lingle '662's teaching in paragraph [0003] that a transmission of at least 70% is needed for windshield applications).

Thus, not only is there no suggestion or motivation in the art for the alleged modification, but the art teaches directly away from the invention of claim 1.

Claims 15 and 24

Claims 15 and 24 also require that "the coated article has no infrared (IR) reflecting layer comprising significant amounts of Ag or Au." Lingle '662 fails to disclose or suggest this as discussed above. Moreover, as explained above, one of ordinary skill in the art would never have modified Lingle '662 to overcome this flaw.

Conclusion

It is respectfully requested that all rejections be withdrawn. All claims are in condition for allowance. If any minor matter remains to be resolved, the Examiner is invited to telephone the undersigned with regard to the same.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: _____
Joseph A. Rhoa
Reg. No. 37,515

JAR:caj
901 North Glebe Road, 11th Floor
Arlington, VA 22203-1808
Telephone: (703) 816-4000
Facsimile: (703) 816-4100